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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☒ This action is **FINAL**.　　2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-11* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-11* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All　b) ☐ Some * c) ☐ None of:
       1. ☒ Certified copies of the priority documents have been received.
       2. ☐ Certified copies of the priority documents have been received in Application No. _____.
       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date *5/25/04*.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments, see page 2 and the first paragraph of page 6, filed 8/26/2004, with respect to the objection to the abstract, have been fully considered and are persuasive. The objection to the specification/abstract has been withdrawn.

2.   Applicant summarizes the general problem addressed in the present application, the solution as described in the specification, and the rejections of the last office action on pages 6-7 of the response filed 8/26/2004. Examiner generally agrees with this characterization of the specification and the rejections.

3.   Applicant's arguments, see "Rejection of claim 2 Under 35 U.S.C. 112" on page 7, filed 8/26/2004 have been fully considered but they are not persuasive. The applicant points out the sections of the specification that support the limitation of "the ID received via the Internet". However, the previous office action rejected claim 2 under 35 U.S.C. 112, second paragraph, for lacking antecedent basis for this limitation *in the claim*. The rejection can be overcome by either specifically referring to "an ID received via the Internet" in parent claim 1 or earlier in claim 2, or by changing the limitation to "an ID received via the Internet". The rejection is maintained below.

4.   Applicant's arguments, see "Rejection of Claims 1 and 10 Under 35 U.S.C. 102(e)" on pages 7-9, filed 8/26/2004, have been fully considered but they are not persuasive.

    In the first paragraph of this section, applicant argues that Beser does not address the problem of penetrating a security firewall do directly address a LAN-connected VoIP telephone

from outside the LAN. While this may be true, there is nothing in the broad claim language that limits claims 1 or 10 as a solution to this type of problem.

In the second and third paragraphs of this section, applicant argues that Beser requires a trusted third-party device in order to successfully originate calls outside the network to telephones in the private network. Applicant argues that this is in contrast to the present application. While there may be differences between Beser and the invention as described in the specification, the claim language is broad and does not exclude the method of Beser; there is nothing in claims 1 and 10 which indicates that the third-party device cannot be used as part of the implementation.

In the fourth paragraph of this section, applicant continues the argument to state that the network device of Beser is not analogous to the telephone controller of claims 1 and 10 because the network device of Beser is external to the private network and the telephone controller of claims 1 and 10 is intended to be internal to the LAN. Applicant cites figures 7 and 8 as evidence of this assertion. However, there is nothing in the claim language indicating whether the telephone controller is located inside or outside of the LAN.

In the fifth paragraph of this section, applicant argues that there is no discussion in Beser of employing an ID 412 like that of the present application. Applicant further argues that Beser discusses using domain names to "initiate the VoIP association" and that neither claim 1 nor claim 10 provides for such negotiation. Applicant further argues in this paragraph that no provision is made for the "unique identifier" of Beser to enable an outside telephone to call an inside telephone without first negotiating a tunneling association. However, there is nothing in the claim language thus limiting the claims. The claim language of claims 1 and 10 is broad and

in no way limits the invention to establishing a connection between an outside telephone and an

inside telephone without first negotiating a tunneling association.

In the sixth paragraph of this section (on page 9), applicant argues that the edge router is

not analogous to the control circuit of the claimed invention because the edge router is external

to the private network. Applicant also argues that the edge router differs from the control circuit

in function. While these points may distinguish the invention described in the specification of

the present application from Beser, there is nothing in the claim language to thus limit claims 1

and 10.

Generally speaking, the applicant has argued points from the specification of the

application and not the claim language. The rejection of claims 1 and 10 under 35 U.S.C. 102 (e)

from the previous action is maintained below.

5.   Applicant's arguments, see "Rejection of Claims 1-3, 6, and 8-11 Under 35 U.S.C.

103(a)" on pages 9-14, filed 8/26/2004, have been fully considered but they are not persuasive.

In the first paragraph of this section, applicant explains that the rejection is traversed.

In the second paragraph of this section, applicant broadly summarizes the general

argument against the rejection and summarizes the Borella reference. Applicant argues that

Borella does not address penetrating a security firewall to directly call a LAN-connected

telephone from outside the LAN; however, the broad claim language does not limit the invention

to this problem of penetrating a security firewall.

In the third paragraph of this section, applicant addresses the rejection of claims 1 and 10.

Applicant argues along lines similar to the argument of the 35 U.S.C. 102(e) rejection. For

example, applicant argues that the gatekeeper of Borella is not analogous to the telephone

controller of claims 1 and 10 because the gatekeeper is external to the edge network of Borella.

Applicant cites figures 7 and 8 to support this argument. However, these limitations are not

contained in the broad claim language of claims 1 and 10. Applicant also argues that Beser does

not contain a discussion of "employing an ID 412 that includes the domain name 302 of the

telephone controller 100, recognizable by the Internet name server 501, along with identification

information (which may include a user name 300 and extension telephone number 301),

recognizable by the telephone controller 100 of the LAN 1". However, the claim language is

broader than this and Beser does disclose the claim limitations as described above and in the

original rejection.

In the fourth paragraph of this section, applicant addresses the rejection of claims 2 and

11. Applicant argues that Borella does not disclose the limitations of these claims because "use

of a NAT-enabled router 3 does not solve the problem of avoid having the firewall block calls to

inside telephones 200, 201 connected to the LAN 1 from an outside telephone 510 connected to

the Internet 2". However, there is nothing in the claim language limiting the invention to these

limitations.

In the fifth paragraph of this section, applicant addresses the rejection of claim 3.

Applicant argues that the claimed invention is distinguishable from Borella because the claim

requires the notification to be performed by the control circuit, while it is done in the router in

Borella. However, in the original office action (lines 7-8 of page 5), examiner stated that "Note

that in this office action, the embodiment whereby the gateway and the router are part of the

same device is assumed (see lines 56-60 of column 6)"; thus the router is the controller and thus

comprises the control circuit. Applicant also argues that the router is clearly distinct from the

telephone controller of the claimed invention because the telephone controller is geared toward

the aforementioned firewall problem. As stated previously, this limitation is not in the current

broad claim language.

In the sixth paragraph of this section, applicant addresses the rejection of claim 6.

Applicant argues that "First, as discussed above in connection with the rejection of Claims 1 and

10 as unpatentable over Borella et al. in view of Beser et al., the ID 412 of the claimed invention

is not analogous to features discussed in Borella". As stated above in this document, examiner

disagrees and believes that the rejection should be maintained in view of the broad claim

language. Applicant further argues that the teaching of Borella cited by the examiner is not

analogous to the limitations of claim 6. Specifically, applicant argues that "While there may be

some generic commonality in terms of storing information relating to VoIP telephone calls, such

storage occurs within entirely distinct architectures and for different purposes, as discussed

above". However, as discussed above, the broad claims in no way limit the invention to the

architectures and purposes of the specification or those cited in the amendment filed 8/26/2004.

Further, applicant argues that "the record kept by Borella et al. appears to be limited to outgoing

calls (those handled by the first gatekeeper) and is done solely for billing purposes, while the

record kept according to Claim 6 appears to include both incoming and outgoing calls

("communication history information for each ID") and is not associated with a limitation as to

purpose". While it may be true that Borella keeps the records for only outgoing calls, there is

nothing in the claims indicating that the table includes both incoming and outgoing calls.

In the seventh paragraph of this section, applicant addresses the rejection of claim 8.

Applicant again argues that the control circuit and ID of claim 8 are not analogous to features in

Borella. Examiner disagrees as stated numerous times above. Further, applicant argues that the

function of allocating an address in Figure 3 of Borella occurs outside the edge networks and

thus is contrasted with claim 8 in which the communication takes place within the LAN 1.

Examiner again disagrees on the basis that the broad claim language in no way limits the

invention to be performed within a single LAN.

In the eighth paragraph of this section, applicant addresses the rejection of claim 9.

Applicant argues that Borella is not analogous to the claimed invention because the transfer of

information does not take place between a telephone controller within a LAN 1 and another

telephone controller. However, examiner disagrees and maintains the position that the gateways

disclose the features of the telephone controllers based on the broad claim language; nothing in

the claim language distinguishes the features of claim 9 from the teachings of Borella as stated in

the previous action.

6.   Applicant's arguments, see "Rejection of Claims 4-5 and 7 Under 35 U.S.C. 103(a)" on

pages 14-17, filed 8/26/2004, have been fully considered but they are not persuasive.

In the first paragraph of this section, the applicant restates the rejection and states the

argument in broad terms.

In the second paragraph of this section, applicant argues that Chimura does contain any

discussion of security or firewalls. Examiner concedes that even if this is the case, there is

nothing in the broad claim language limiting the claims this way. Applicant provides what

appears to be an accurate summary of the Chimura reference in the rest of this paragraph.

In the third paragraph of this section, applicant addresses the rejection of claim 4.

Applicant argues that the host name of Chimura is not analogous to the user name of the claimed

invention as a host identifies a computer which may have several user accounts. Applicant

argues that Chimura gives city names as examples of the host name while the specification of the

present application gives personal names as examples of the user name. However, these

examples are not part of the claimed limitation and the examiner has given the term the broadest

reasonable interpretation which certainly reads on host name as this helps identify the particular

user. The combination of host name and office number identifies a particular telephone set to

which the call is destined. Applicant further argues that the office number appears to be distinct

from extension number and cites column 7, lines 50-61 as evidence. Examiner disagrees and has

again given the claim it's broadest reasonable interpretation. The office number is used along

with the host name to identify the telephone set to which a call is destined and as such can be

seen as a telephone extension number in the broadest reasonable reading of the claim. Applicant

additionally argues that Chimura doesn't address the problem of enabling telephones 200, 201 to

receive direct calls from an outside telephone 510. As stated above, the broad claim language

does not limit the claims in this manner and thus Chimura discloses the limitation of this claim.

In the fourth paragraph of this section, applicant addresses the rejection of claim 5.

Applicant argues that the host name of Chimura is not analogous to the user name of the claimed

invention as a host identifies a computer which may have several user accounts. As stated above

regarding claim 4, the examiner has given the term the broadest reasonable interpretation which

certainly reads on host name as this helps identify the particular user. The combination of host

name and office number identifies a particular telephone set to which the call is destined.

Applicant further argues that the office number appears to be distinct from extension number.

Examiner disagrees and has again given the claim it's broadest reasonable interpretation. The

office number is used along with the host name to identify the telephone set to which a call is

destined and as such can be seen as a telephone extension number in the broadest reasonable

reading of the claim. Applicant additionally argues that Chimura doesn't address the problem of

enabling telephones 200, 201 to receive direct calls from an outside telephone 510. As stated

above, the broad claim language does not limit the claims in this manner and thus Chimura

discloses the limitation of this claim.

In the fifth paragraph of this section, applicant addresses the rejection of claim 7.

Applicant argues that Figure 3 of Borella does not appear to reveal anything analogous to

updating a table. However, as stated in the original rejection in the previous office action, the

telephone initiates the sequence with the initial setup and the router is ultimately updated by

allocating address(es) and thus updating a table within the router. Applicant also argues that

there is not analog to the telephone controller because of differences in architecture; examiner

has previously argued that these architectural differences are not contained in the claim language.

For reasons disclosed in detail above, the previous rejections are maintained and this

office action is made final.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

8.   Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention. Claim 2 recites the limitation "the ID received via the internet" in line 3. There is

insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

10.   Claims **1 and 10** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent

6,496,867 to Beser et al.

        Regarding claims **1 and 10**, Beser discloses a telephone controller (network device 14 of

Figure 1) controlling a plurality of telephones (represented by telephony device 24 of Figure 1)

connected to the Internet (public network 12 of Figure 1) via a LAN (private network 20 of

Figure 1). The telephone controller (network device 14) comprises an IP address allocating

circuit which allocates a private IP address to each of the telephones as described in step 152 of

Figure 8. The network device selects a private IP address for the telephone that initiated the

voice-over-IP session in Figure 5. Beser discloses the limitation of a memory in which a table

indicating a correspondence between IDs of the plurality of telephones and the private IP

addresses is stored in lines 28-36 of column 12. The VoIP association is the tunneling

association discussed throughout Beser and is identified with an originating and terminating

telephony device. This passage clearly indicates that the private IP addresses are stored in a

network address table on the network device. Beser discloses the limitation of a control circuit

which controls communication between the telephones and the Internet using private IP

addresses in lines 19-24 of column 4 in which the network devices are described as edge routers

in an exemplary embodiment. This passage indicates that these routers route packets between

the public and private networks, thus controlling the communication between the telephones and

the Internet (public network). Beser discloses the limitation that the ID includes a domain name

in lines 38-41 and 55-57 of column 10.

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

12.   Claims **1-3, 6 and 8-11** are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent 6,731,642 to Borella et al in view of U.S. Patent 6,496,867 to Beser et al.

Regarding claims **1 and 10**, Borella discloses a telephone controller (gatekeeper 30 or 32

and router 18 or 20 of Figure 1) controlling a plurality of telephones (represented by caller

station 24 Figure 1) connected to a LAN (edge network 14 of Figure 1). Note that in this office

action, the embodiment whereby the gateway and the router are part of the same device is

assumed (see lines 56-60 of column 6). Borella discloses the limitation of an IP address

allocating circuit which allocates a private IP address to each of the telephones in lines 19-22 of

column 9 which describes the allocation of a private IP address by the router 20. Borella

discloses the limitation of a memory in which a table indicating a correspondence between Ids of

the telephones and the private IP addresses is stored in the network address translation performed

by the routers (see lines 49-53 of column 10 for example). In order to perform this translation, it

is inherent that the router must have a table storing the association between the station ID (proxy

public callee address) and the private IP address (private callee address). Borella also discloses a

control circuit which controls communication between the plurality of telephones and the

Internet using the private IP addresses in lines 49-53 of column 10. This explains how the router

performs network address translation on the packets between the caller and callee which controls

the communication between these devices over the Internet (IP Backbone media stream 12).

Borella does not disclose expressly the limitation that the ID includes a domain name of

the telephone controller and identification information.

Beser discloses the limitation that the ID includes a domain name and identification

information in lines 38-41 and 55-57 of column 10. Borella and Beser are analogous art because

they are from the same field of endeavor of communication using IP networks. At the time of

the invention, it would have been obvious to modify Borella to use the email address (including

the domain name) of the user as the ID. The motivation for doing so would have been to allow

easier mobility of the users as suggested in lines 57-66 of column 10. Therefore, it would have

been obvious to combine Beser with Borella for the benefit of easier mobility of users to obtain

the invention as specified in claims 1 and 10.

Regarding claims **2 and 11**, Borella discloses the limitation of extracting identification

information and searching the table to obtain the private IP address in the network address

translation described in lines 49-53 of column 10.

Regarding claim **3**, Borella discloses the limitation that the control circuit notifies the

allocated IP address to the telephone in step 104 of figure 3. As described in lines 24-26 of

column 9, this message includes the private callee address.

Regarding claim **6**, Borella discloses the limitation that the memory stores a table

indicating communication history information for each ID in lines 14-15 of column 8. Here,

Borella explains that the gatekeeper will store the private caller address in order to determine

billing information (which requires a history of the communication information).

Regarding claim **8**, Borella discloses the means for receiving the ID wherein the control

circuit stores the ID received from said means in the allocate address messages of Figure 3.

These messages contain ID information which are inherently received (transferred from one

device to another) and are inherently stored (as discussed above in order to use this information

to perform the network address translation).

Regarding claim **9**, Borella discloses the limitation of the transfer circuit which transfers

information stored in the table to some other telephone controller in the gatekeeper setup

message 92 of Figure 3. As described in lines 45-52 of column 8, this message includes caller

and callee identification information (stored in the table) from one telephone controller (first

gatekeeper) to another telephone controller (second gatekeeper).

13.   Claims **4-5 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent 6,731,642 to Borella et al in view of U.S. Patent 6,496,867 to Beser et al as applied to

parent claim 1 under 35 USC 103(a) above, and further in view of U.S. Patent 6,400,719 to

Chimura et al.

Regarding claim **4**, the limitations of the parent claim 1 are disclosed by Borella and

Beser as addressed above. Borella and Beser do not disclose expressly the limitation of claim 4

of the identification information being composed of a user name and an extension telephone

number. Chimura discloses the limitation of identification information being composed of a user

name (host name) and extension telephone number (office number) in lines 52-54 of column 5.

Borella, Beser, and Chimura are analogous art because they are from the same field of endeavor

of communication using IP networks. It would have been obvious to modify Borella, as

modified above, to store the telephone extension and user name in a table. The motivation for

doing so is so that the host name associated with the office number can be used to access a DNS

server to determine the location of the gateway serving that host as described in the abstract.

Therefore, it would have been obvious to combine Chimura with Borella and Beser for the

benefit of using a standard DNS server to obtain the invention as specified in claim 4.

Regarding claim 7, with the limitations of parent claim 4 addressed above, Borella

discloses the limitation of the table being updated in response to a request from the telephone in

Figure 3. The telephone initiates the sequence with the initial setup which ends up in the table in

the router being updated to support the network address translation discussed above.

Regarding claim 5, the limitations of the parent claim 1 are disclosed by Borella and

Beser as addressed above. Borella and Beser also disclose the memory containing a table

relating the ID and the private IP address in the network address translation discussed above.

Borella and Beser do not disclose expressly the limitation of claim 5 of the memory storing a

table indicating the correspondence among the extension and user name in addition to the ID and

private IP address. Chimura discloses the limitation of the table including additionally a user

name (host name) and extension telephone number (office number) in Figure 4. Borella, Beser,

and Chimura are analogous art because they are from the same field of endeavor of

communication using IP networks. It would have been obvious to modify Borella, as modified

above, to store the telephone extension and user name in a table. The motivation for doing so is so that the host name associated with the office number can be used to access a DNS server to determine the location of the gateway serving that host as described in the abstract. Therefore, it would have been obvious to combine Chimura with Borella and Beser for the benefit of using a standard DNS server to obtain the invention as specified in claim 4.

Conclusion

14.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169. The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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RCS 12-20-04

Robert C. Scheibel
Examiner
Art Unit 2666

**FRANK DUONG
PRIMARY EXAMINER**